9:00

773-3 Thrombolysis After Resuscitation in Acute Myocardial Infarction

Rudolf Schiele, Jörg Rustige, Udo Burczyk, Armin Koch, Dietrich Harmjanz, Ulrich Tebbe, Jochen Senges, for the ALKK Study Group. *Herzzentrum Ludwigshafen, ZMBT Heidelberg; Germany*

Cardiopulmonary resuscitation (CPR) is often regarded as a relative contraindication to thrombolytic therapy in AMI. We present results about the usage, safety and efficacy of iv-lysis in CPR pts with AMI. "The 60-Minutes Myocardial Infarction Project" is an open German multicenter study, which registered all transmural AMI in 136 hospitals prospectively over 27 months. From a total of 14.980 AMI, 681 pts (4.5%) received CPR with chest compressions (mean age 64 ± 13 yrs, 73% male, 53% anterior wall MI).

Results: 45% of all CPR pts received iv-thrombolysis. CPR pts with lysis had a lower intrahospital mortality, despite more bleeding complications. In a multivariate analysis adjusting for 14 risk factors (including age), lysis was independently associated with a lower mortality (odds ratio 0.6, 95%-CI 0.4–0.9), except for the subgroup of pts with a left bundle branch block (12%), who did not benefit from lysis (OR 3.7, 95%-CI 0.9–15).

CPR in AMI	All CPR (n = 681)	Lysis (n = 308)	No lysis (n = 373)	p
Hospital mortality	56%	48%	62%	<0.001
Hemorrhage & transfusion	3.4%	6.5%	0.8%	<0.001

Conclusions: The outcome in nonrandomized CPR pts with AMI receiving thrombolysis is better despite more bleeding complications. The improved outcome is most likely a lysis effect, not only a selection bias.

9:15

773-4 Predictors of Maintained Infarct Artery Patency After Primary Angioplasty in High Risk Patients in PAMI-2

Keith H. Benzuly, William W. O'Neill, Bruce Brodie, John Griffin, Thomas Shimshak, Denise E. Jones, Mariann Graham, Lioudmila Mitina, Cindy L. Grines. *William Beaumont Hospital, Royal Oak, Michigan*

Sustained reperfusion is an important predictor of long term prognosis following acute MI. To determine predictors of sustained infarct artery (IRA) patency after primary PTCA, we performed a blinded core lab analysis of 298 high risk pts who underwent protocol re-catheterization prior to discharge in the PAMI-2 study. Primary PTCA was successful (IRA < 50% residual stenosis and TIMI 2–3 flow) in 95.8% of high-risk patients.

	ReCath TIMI flow		P-value
	0–1 (n = 27)	2–3 (n = 271)	
ASA at home (%)	19.2	21.8	0.76
Prior MI (%)	4.0	21.8	0.04
Multivessel Disease (%)	40.7	52.0	0.26
Right coronary PTCA (%)	40.7	32.8	0.41
Balloon Size (mm)	3.11 ± 0.45	3.08 ± 0.46	0.73
Post PTCA TIMI-3 (%)	92.6	90.8	0.75
Residual Stenosis (mean)	25.9 ± 18.3	22.7 ± 11.9	0.38
Post PTCA Dissection (%)	48.2	24.6 (N = 264)	0.009

Acute ejection fraction, infarct zone wall motion, presence of thrombus, use of lytics or balloon pump, age, diabetes, smoking, hypertension and hyperlipidemia were not predictive of TIMI flow at recath.

Conclusion: Absence of prior myocardial infarction or the presence of dissection following PTCA in high risk MI pts is predictive of reocclusion on the pre-discharge angiogram. Aggressive treatment of dissection complicating PTCA of acute MI may improve outcome.

9:30

773-5 Antiplatelet vs. Anticoagulation Treatment After Intracoronary Palmaz-Schatz Stent Placement in Acute Myocardial Infarction — A Prospective Randomized Trial

Hanna Walter, Franz-Josef Neumann, Gert Richardt, Eckhard Alt, Claus Schmitt, Rudolf Blasini, Helmut Schühlen, Martin Hadamitzky, Eva Zitzmann, Albert Schömig. *1. Medizinische Klinik, Klinikum rechts der Isar, Technische Universität Munich, Germany*

A recent study has demonstrated the feasibility and safety of intracoronary stent placement in acute myocardial infarction (AMI). Aim of our study was the comparison of two different antithrombotic regiments after stenting in AMI. Within a prospective randomized trial an anticoagulation protocol (aspirin 100 mg bid + phenprocoumon i.v.-heparin until a target INR of 3.5) was compared with an antiplatelet protocol (aspirin 100 mg bid + ticlopidine 250 mg bid). Between October 1, 1994, and August 31, 1995, 105 randomized patients had stent placement in uncomplicated AMI. Patients with cardiogenic shock or the need of mechanical ventilation were excluded from randomization. So far 54 patients are randomized for anticoagulation, 51 for antiplatelet protocol. The randomization will be completed October 1, 1995. Cardiac events (death, myocardial reinfarction, stent occlusion, CABG, repeat PTCA) and bleeding events requiring transfusion or surgery, or impairing organ function, and local groin complications are assessed. Reangiography is performed two weeks and 6 months after the intervention. Angiographic data are evaluated by an automated edge detection method.

Analysis of the two treatment groups for clinical events and angiographic outcome during a 30 day and 6 month follow up period will be presented.

9:45

773-6 Stenting for Acute Myocardial Infarction: The Early United States Multicenter Experience

Steven R. Steinhubl, David J. Moliterno, Paul S. Teirstein, Erminia M. Guarneri, Frank V. Aguirre, James J. Ferguson, Emerson C. Perin, Neil Strickman, Dean Kereiakes, James E. Tcheng, Steven G. Ellis, Eric J. Topol. *The Cleveland Clinic Foundation, Cleveland, OH*

Plaque fissuring and rupture, with resultant thrombosis, is the etiology of acute MI in nearly all patients with ST elevation. Primary and rescue angioplasty of the infarct-related artery not infrequently results in a localized or propagated intimal dissection, and in some patients rethrombosis of the vessel. Empirically, stenting was thought to be contraindicated for acute MI because of the propensity for thrombosis.

Methods: With contemporary optimal stent deployment techniques, which appear to reduce subacute thrombosis in elective interventions, this application in acute MI was explored at 6 U.S. centers involving 44 patients.

Results: Direct intervention was performed in 68% of patients and as rescue after failed thrombolysis in 32%. Stents were placed secondary to dissection in 76%, sub-optimal results in 19% and as primary treatment in 5%. More than 1 stent was placed in 27%. The average vessel size was 3.22 mm, and the average maximal inflation pressure was 13.8 atm. Periprocedural medications included heparin (100%), aspirin (100%), urokinase (27%), ReoPro (19%), Ticlid (19%) and Persantine (5%). Initial procedural success rate was 95%. 30-day outcome included 2% re-PTCA, 5% CABG and 7% mortality. Two of these adverse outcomes (4.5% of total cohort) were secondary to subacute stent thrombosis.

Conclusion: Using current optimal stent deployment techniques with antiplatelet and anti-thrombotic therapy, intracoronary stents are a promising therapy in evolving MI. True risk and cost-benefit assessment will require prospective randomized trials.

774 Calcium Antagonist Therapy in Heart Failure

Wednesday, March 27, 1996, 8:30 a.m.–10:00 a.m.
Orange County Convention Center, Room 222

8:30

774-1 Long-Term Calcium-Channel Blockade Causes Left Ventricular Dilation in Asymptomatic Patients With Chronic Infarction

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Calcium-channel blocker (CCB) may precipitate adverse events in patients with severe left ventricular (LV) dysfunction after myocardial infarction (MI). LV dilation precedes LV dysfunction and is an independent predictor of adverse events and mortality in patients after MI. We tested that the new-generation CCB nisoldipine (Niso), a potent vasodilator, may prevent LV dilation (remodeling) after mild asymptomatic LV-dysfunction following moderate MI. In a